

# Install and configure a Debian stable base system in a virtual machine

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# Content

- 1 Installation
- 2 Configuration
- 3 Connection via VNC
- 4 Installing a desktop environment
- 5 References

# Installation

## Create image with a size of 8G:

```
kvm-img create -f raw vmua.img 8G
```

## Install Debian Stable on the virtual machine:

```
kvm -m 1200M -net vde,sock=/var/run/kvm0ctl  
-net nic,macaddr=de:ad:00:00:00:16,model=virtio  
-drive file=vmua.img,if=virtio,cache=writeback  
-usbdevice tablet  
-cdrom /home/tbl/debian-6.0.7-amd64-netinst.iso  
vmua.img
```

# Configuration I

## Start Debian Stable in background:

```
kvm -m 1200M -net vde,sock=/var/run/kvm0ctl  
-net nic,macaddr=de:ad:00:00:00:16,model=virtio  
-drive file=vmua.img,if=virtio,cache=writeback  
-usbdevice tablet vmua.img &
```

## Set host name:

```
vi /etc/hostname → set name → :wq
```

# Configuration II

## Set static IP address:

vi /etc/network/interface → edit “#The primary network interface”  
change this:

```
# The primary network interface  
allow-hotplug eth0
```

```
iface eth0 inet dhcp
```

with:

```
# The primary network interface  
auto eth0
```

```
iface eth0 inet static
```

```
address 192.168.16.16
```

```
gateway 192.168.16.1
```

```
netmask 255.255.255.0
```

```
network 192.168.16.0
```

```
broadcast 192.168.16.255
```

→ :wq → /etc/init.d/networking restart

# Configuration III

## **Change user and group ID:**

use tools:

```
groupmod -g 1016 uwe
```

```
usermod -u 1016 -g 1016 uwe
```

or change it manually:

modify /etc/passwd → change user and group ID

modify /etc/group → change group ID

# Preparing VNC connection on i12r-tbl

## Start Debian Stable in background:

```
kvm -m 1200M -net vde,sock=/var/run/kvm0ctl  
-net nic,macaddr=de:ad:00:00:00:16,model=virtio  
-drive file=vmua.img,if=virtio,cache=writeback,boot=on  
-usbdevice tablet  
-chardev socket,id=monitor,path=$HOME/debian-stable.monitor,  
server,nowait  
-mon chardev=monitor,mode=readline  
-vnc :16,password vmua.img &
```

## Connect to the UNIX socket of the hypervisor monitor:

```
nc -U $HOME/debian-stable.monitor
```

## Set new password:

```
change vnc password
```

# Connection via VNC from home

## **Connect via ssl and forward a port:**

```
ssh -p 8574 -L 5916:127.0.0.1:5916 uwe@i12r-tbl.informatik.tu-muenchen.de
```

## **Open vncviewer in a new shell:**

```
xvnc4viewer :16
```

# Installing a desktop environment

**Debian Squeeze normally includes GNOME 2.30**

**For installation we use tasksel to install only Debian's sel. of apps**

**Preparing installation:**

`apt-get install aptitude tasksel`

**Install GNOME:**

`tasksel install gnome-desktop --new-install`

**After installation connect via `xvnc4viewer`**

# References

- <http://www.massimilianomarini.com/28/05/2011/how-setup-static-ip-address-debian-6-squeeze>
- <http://it.toolbox.com/blogs/locutus/how-to-change-a-users-uid-and-gid-26368>
- <http://wiki.debian.org/Gnome>